

Bulb Growing in Washington

Comparatively few know of the interesting experiments that are being carried on at the Bulb Garden near the town of Bellingham, Washington under the direction of the Secretary of Agriculture.

For years the United States has been sending to Holland and European countries many thousands of dollars annually or hyacinth, tulip, narcissus and crocus bulbs. The purchase of these bulbs had constantly increased until the past year when over a million dollars worth were imported.

In 1908 the Secretary of Agriculture decided to establish on the Pacific Coast a garden for the culture and propagation of Holland bulbs and a point on the Puget Sound, near the town of Bellingham, was selected as having a suitable soil and climate for this work. A tract of 10 acres was leased through the Bellingham Board of Trade and the necessary buildings erected and turned over to the Department of Agriculture for the purpose of demonstrating whether or not the Holland bulbs could be grown successfully at that point.

The Department commenced work at once and the same year planted over 170,000 bulbs. From that time

the work has gone on increasing until the present year when over 869,000 bulbs were planted. The increase in the number of bulbs has been very gratifying; each bulb yielding the maximum number of young ones which have proven equal, if not superior, to the results obtained in Holland.

It is believed that bulbs can be grown on the Pacific Coast and of a quality that will compare favorably with, and in many ways, surpass the imported article, the cost of production and marketing being now the chief obstacles.

An effort is being made to overcome the difference between the high price of labor in America and the cheap labor of Europe by inventing appliances to lessen the hand labor required in bulb production and the substitution of horse power for many of the operations performed entirely by hand in Europe has reduced the cost of production considerably. In this way it is hoped that growers in the United States will be able to compete successfully with the European bulb growers.

A serious drawback to the production of Holland bulbs on the Coast is the heavy expense of freight shipments across the continent, but when shipment can be made by water, as will be the case after the completion of the Panama Canal, it should be possible to deliver such bulbs at the port of New York almost as cheaply as they can be brought from Europe. Furthermore, the demand for such bulbs for planting on the Pacific Coast is rapidly increasing.

These experiments are solely for the purpose of showing prospective bulb growers what can be done in growing these bulbs in the United States. The gardens are always open to the public and when the bulbs are in bloom thousands avail themselves of the opportunity to visit the gardens and enjoy the flowers. At that time it is a veritable little Holland. Thousands upon thousands of hyacinths, tulips and narcissus in all colors and nearly all in flower at once can be seen.

Careful records are being kept and much valuable information is being collected in connection with the bulb experiments which will, eventually, be at the disposal of anyone who may wish to take up bulb growing.

Last year a very interesting experiment was made on the trial grounds of the Department of Agriculture at Washington where a test was made of the bulbs that had been grown at Bellingham in comparison with those grown in Holland. Fifty bulbs of the same varieties of tulips were planted side by side and given the same treatment. Those from Bellingham opened their flowers from seven to ten days earlier than the Holland-grown bulbs; were of better quality in size of flower and in color and were remarkable for the almost total absence of disease; while the imported bulbs showed a larger number of diseased plants and many of them failed to produce a flower.

As the demand for such flower roots is increasing rapidly and bids fair to double in value within a few years it offers a promising field for the investment of American capital and the establishment of a new and profitable



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industry on the Pacific Coast which will keep home the large amount of money now being sent abroad annually for bulbs.

Combatting Dandelions in Lawns.

Professor R. Kent Beattie, Botanist at the State College and Experiment Station, has prepared the following statement as an answer to many requests for information as to how to combat dandelions in lawns:

The common dandelion is on the increase as a pest in the lawns of Eastern Washington. It is a very difficult plant to eradicate. It perpetuates itself by a large, fleshy root which is difficult to kill and this must be removed before one can get rid of the plant. A very common method is to dig out as much of the root as possible with a long, heavy knife, or with a tool called a spud, and then to put a few drops of coal oil on the cut surface of the roots. In many cases coal oil kills that part of the root

which remains. It is, however, not perfectly successful. Some persons have tried sulphuric acid on the roots. This is a difficult thing to handle for it is very injurious to the hands and the person. It usually kills the dandelion roots, but in some cases they escape.

Recently a good many people have tried spraying for dandelions, and this is recommended by some. The method used is to make a solution of iron sulphate, two pounds to one gallon of water. Apply this to the lawn with a spray pump so that it will make a fine mist. Some people put half an ounce of sulphuric acid in each gallon of the spray. In any event, all that this spray can do is to kill the tops. If, however, one should begin in the spring and kill the tops with the spray and then repeat the process as often as new ones appear, one ought in time to get rid of the roots by starving them out. This spray does little or no injury to lawn grass and clover. It sometimes blackens the edges of leaves a little, but the damage is never serious. From the standpoint of cheapness and ease of application at least, this is probably the best method to use in fighting the dandelion.

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